

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE .	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,416	04/07/2004	Sean Christopher Endler	81488 7114	7822
37123 FITCH EVEN	7590 08/20/2007 TABIN & FLANNERY		EXAMINER	
	ASALLE SUITE 1600		BASOM, BLAINE T	
CHICAGO, IL 60603			ART UNIT	PAPER NUMBER
			2173	
			<u> </u>	
			MAIL DATE	DELIVERY MODE
•			08/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

X)	

	Application No.	Applicant(s)				
Office Assistant Occurrence	10/820,416	ENDLER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Blaine Basom	2173				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION B6(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	lely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status	· · · · · · · · · · · · · · · · · · ·	· .				
1) Responsive to communication(s) filed on 07 Ju	ine 2007					
· = · ·	action is non-final.					
· _ · . · · · · · · · · · · · · · · · ·						
, , , , , , , , , , , , , , , , , , , ,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
ologica in addordance with the practice and in	A parte quayre, 1000 C.B. 11, 40	.5. 2.15.				
Disposition of Claims						
4) Claim(s) <u>1-11,26-28 and 30-44</u> is/are pending i	n the application.	•				
4a) Of the above claim(s) is/are withdray	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6) Claim(s) <u>1-11,26-28 and 30-44</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	en e					
10) The drawing(s) filed on is/are: a) acce		Evaminer				
Applicant may not request that any objection to the		•				
Replacement drawing sheet(s) including the correct						
11) The oath or declaration is objected to by the Ex	• • • • • • • • • • • • • • • • • • • •	, , ,				
		7.00.011 07.101111 1 1 0 102.				
Priority under 35 U.S.C. § 119		·				
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:		-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau	, ,,					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date					
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other:						
. spor rroto/man batto	٠, ٢, ٥,,,٥,, ٢, ٠,٠,٠,٠,٠,٠,٠,٠,٠,٠,٠,٠,٠,٠,٠,٠,٠,					

#### **DETAILED ACTION**

### Response to Arguments

The Examiner acknowledges the Applicants' amendments to claims 1, 9, 11, and 26, the Applicants' cancellation of claims 12-25 and 29, and the Applicants' addition of new claims 30-44. In response to the Applicants' arguments, the 35 U.S.C. §112, second paragraph rejection presented in the previous Office Action for claims 7 and 8 is respectfully withdrawn.

Regarding the pending claims, the Applicants argue that the art of record fails to teach a "physical spherical display surface," as is now claimed. In response, the Examiner respectfully presents the teachings of Fitzmaurice (U.S. Patent Application Publication No. 2004/0001111 to Fitzmaurice et al.), which as more fully shown below, include such a physical spherical display surface. The Applicants' arguments with respect to the pending claims have thus been considered, but are moot in view of the following new grounds of rejection, which are required in response to the Applicants' amendments.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 9-11, 30, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,628,313 to Minakuchi et al. (hereafter "Minakuchi"), and also over U.S.

Patent Application Publication No. 2004/0001111 to Fitzmaurice et al. (hereafter "Fitzmaurice"). In general, Minakuchi describes an information retrieval method and apparatus in which main information, specified by the user, is displayed along with sub-information related to the main information (see e.g. column 2, line 65 – column 3, line 21). Minakuchi particularly discloses that the main information and its associated sub-information are presented via "virtual sphere" (see e.g. column 8, line 63 – column 9, line 14; and FIG. 5).

Specifically regarding claims 1 and 11, Minakuchi discloses: means for displaying a first content (i.e. "main information") on a flat display surface within a spherical display (see e.g. column 2, line 65 – column 3, line 12; column 8, line 63 – column 9, line 14; and reference number 201 in FIG. 5); means for simultaneously displaying a second content (i.e. "sub-information") on a spherical display surface within the spherical display (see e.g. column 2, line 65 – column 3, line 12; column 8, line 63 – column 9, line 14; and reference number 203 in FIG. 5); and means for scrolling through the second content (i.e. "rotating" the spherical display surface) based on instructions while displaying the first content (see e.g. column 9, lines 1-14), wherein the spherical display surface is imposed over the flat display surface such that the first content and the second content are distinctly and simultaneously viewed (see e.g. FIG. 5). Minakuchi, however, does not explicitly disclose that the spherical display surface is a *physical* spherical display surface, as is recited in claims 1 and 11. Nevertheless, physical spherical displays are well known in the art.

For example, Fitzmaurice demonstrates displaying content via a volumetric display, which can take the form of a physical spherical display (see e.g. paragraph 0024, and FIG. 1). Fitzmaurice further teaches displaying first content on a flat display surface within the spherical

Art Unit: 2173

display and second content on a physical spherical display surface within the spherical display (see e.g. paragraphs 0012-0014; paragraph 0025; and FIG. 2).

It would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi and Fitzmaurice before him at the time the invention was made, to implement the information retrieval method of Minakuchi on the volumetric display of Fitzmaurice, i.e. to display the first content on a flat display surface within the volumetric display and to simultaneously display the second content on a physical display surface within the volumetric display. It would have been advantageous to one of ordinary skill to utilize this combination because such a volumetric display allows a user to have a *true* three-dimensional view of the content, as is taught by Fitzmaurice (see e.g. paragraph 0024). Accordingly, Minakuchi and Fitzmaurice teach a method and system like that of claims 1 and 11, respectively.

As per claim 2, Minakuchi further teaches storing the first content (i.e. "main information") and the second content (i.e. "sub-information") in a storage device (see e.g. column 2, line 65 – column 3, line 12; and column 5, lines 56-58).

Concerning claim 9, Minakuchi demonstrates that the second content (i.e. the "sub-information") comprises a plurality of icons or thumbnails from which the user may select (see e.g. FIGS. 5-7; column 6, lines 33-40; column 9, lines 1-14; and column 9, lines 34-58). The second content described by Minakuchi is thus considered "menu information" like claimed.

With respect to claim 10, Minakuchi demonstrates that the spherical display surface displays the second content (i.e. the "sub-information") in a three dimensional viewpoint (see e.g. column 8, lines 63-67; and reference number 203 in FIG 5).

As per claims 30 and 35, Fitzmaurice demonstrates that the spherical display is semi-spherically shaped, wherein the spherical display surface substantially spans the semi-spherical shape of the spherical display and the flat display surface is coupled to the spherical display surface and spans a diameter of the spherical display surface (see e.g. paragraph 0025, and FIG. 2).

Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi and Fitzmaurice, as is described above, and also over PCT Publication No. WO 02/21529 to Barbieri. As described above, Minakuchi and Fitzmaurice teach a method like that of claim 1, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Minakuchi and Fitzmaurice, however, do not explicitly disclose that the first content is a video stream or digital image, as is recited in claim 6, or that the first content is captured with a content capturing device, e.g. a video camera or digital camera, like recited in claims 3-5. Nevertheless, capturing video streams or digital images with such content capturing devices, and then searching through the captured information is well known in the art.

For example, Barbieri teaches displaying a digital video image (considered analogous to the "main information" of Minakuchi) and determining similar video images (considered analogous to the "sub-information" of Minakuchi) that are associated with the video image (see e.g. page 2, lines 11-34). Such digital video images are necessarily taken with a content

capturing device, i.e. a digital video camera, as is well-known in the art (see e.g. page 9, lines 31-34 of Barbieri).

Accordingly, it would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Fitzmaurice, and Barbieri before him at the time the invention was made, to apply the spherical display of Minakuchi and Fitzmaurice to search for particular video images within a video stream captured by a digital video camera, like taught by Barbieri. That is, it would have been obvious to modify the spherical display of Minakuchi and Fitzmaurice such that the main information (i.e. the first content) is a video image, which has been captured by a content capturing device, i.e. a digital video camera. It would have been advantageous to one of ordinary skill to apply the interface of Minakuchi to search video, because video search functionality is becoming useful due to the increase of multimedia data that can be stored in home devices, as is taught by Barbieri (see e.g. page 1).

Claims 32 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, and Barbieri, which is described above. As described above, Minakuchi, Fitzmaurice, and Barbieri teach a method like that of claim 3 and a system like that of claim 11, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Barbieri particularly teaches that the first content can be a video stream or digital image captured with a content capturing device, as is described above (see e.g. the rejection for claim 3). Minakuchi, Fitzmaurice, and Barbieri, however, do not explicitly teach controlling at least one of the direction and speed of such a video stream, as is required by

Art Unit: 2173

claims 32 and 37. Nevertheless proving users the ability to control the direction and speed of playback of a video stream (by e.g. fast forward, reverse, etc. functions) is notoriously well known in the art. The Examiner takes OFFICIAL NOTICE of this teaching. Accordingly, it would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Fitzmaurice, and Barbieri before him at the time the invention was made, to allow a viewer watching the first content (e.g. a video stream) displayed by the spherical display of Minakuchi, Fitzmaurice, and Barbieri to change the direction or speed of playback of the content, like known in the art. It would have been advantageous to one of ordinary skill to apply this modification because it allows the user to, for example, skip over parts of the content (i.e. by fast forward operations) that are not interesting to the user, as is known in the art.

Claims 31 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, and Barbieri, which is described above, and also over U.S. Patent No. 7,107,516 to Anderson et al. (hereafter "Anderson"). As described above, Minakuchi, Fitzmaurice, and Barbieri teach a method like that of claim 3 and a system like that of claim 11, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Barbieri particularly teaches that the first content can be a video stream or digital image captured with a content capturing device, as is described above (see e.g. the rejection for claim 3). Minakuchi, Fitzmaurice, and Barbieri, however, do not explicitly disclose that the spherical display is coupled to the content capturing device, as is required by claims 31 and 36. Nevertheless, Anderson demonstrates coupling a display device to a content

capturing device for the purpose of viewing and searching content captured by the content capturing device (see e.g. column 2, lines 30-51). Accordingly, it would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Fitzmaurice, Barbieri, and Anderson before him at the time the invention was made, to couple a content capturing device to the spherical display of Minakuchi, Fitzmaurice, and Barbieri, since this would allow the user to view on the display content captured by the user, as is demonstrated by Anderson.

Claims 33 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, and Barbieri, which is described above, and also over U.S. Patent Application Publication No. 2004/0264579 to Bhatia et al. (hereafter "Bhatia"). As described above, Minakuchi, Fitzmaurice, and Barbieri teach a method like that of claim 3 and a system like that of claim 11, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Barbieri particularly teaches that the first content can be a video stream or digital image captured with a content capturing device, as is described above (see e.g. the rejection for claim 3). Minakuchi, Fitzmaurice, and Barbieri, however, do not explicitly disclose that multiple video feeds are simultaneously displayed, as is required by claims 33 and 38. Nevertheless, simultaneously displayed multiple video feeds are well known in the art. For example, Bhatia demonstrates a method for simultaneously displaying a plurality of video streams (see e.g. paragraphs 0011-0014). It would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Fitzmaurice, Barbieri, and Bhatia before him at the time the invention was made, to apply the display of Minakuchi, Fitzmaurice,

and Barbieri to simultaneously display a plurality of video feeds, because it is a useful feature in video presentation systems, as taught by Bhatia (see e.g. paragraphs 0004-007).

Claims 34 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, and Barbieri, which is described above, and also over U.S. Patent Application Publication No. 2003/0146915 to Brook et al. (hereafter "Brook"). As described above, Minakuchi, Fitzmaurice, and Barbieri teach a method like that of claim 3 and a system like that of claim 11, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Barbieri particularly teaches that the first content can be a video stream or digital image captured with a content capturing device, as is described above (see e.g. the rejection for claim 3). Minakuchi, Fitzmaurice, and Barbieri, however, do not explicitly disclose that the spherical display is configured to apply special effects (i.e. sepia tone, black and white tone, and/or slow shutter effect) to a portion of this content, as is required by claims 34 and 39. Nevertheless applying such special effects to video is well known in the art. For example, Brook demonstrates applying sepia tone and black and white special effects (see e.g. paragraph 0186). It would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Fitzmaurice, Barbieri, and Brook before him at the time the invention was made, to modify the display of Minakuchi, Fitzmaurice, and Barbieri to apply special effects to the content, like taught by Brook. It would have been advantageous to one of ordinary skill to apply this modification because it allows the user to, for

Art Unit: 2173

example, change to appearance of the content to suit his or her taste, as is demonstrated by Brook.

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi and Fitzmaurice, as is described above, and also over U.S. Patent Application Publication No. 2002/0030665 to Ano. As described above, Minakuchi and Fitzmaurice teach a method like that of claim 1, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. This second content is scrolled in response to instructions based on an input device, e.g. a trackball (see e.g. paragraph 0082). As such, Minakuchi does not explicitly disclose that these instructions for scrolling are based on rotating a playback ring or knob, as is expressed in claims 7-8.

Nevertheless playback rings and knobs are well-known types of input devices used for scrolling displayed information. For example, Ano describes a playback ring (i.e. a "wheel"), considered a type of knob, which is used in conjunction with, e.g. a trackball, to scroll through content displayed on a screen (see e.g. paragraphs 0005, 0009, and 0098-0101).

It would have therefore been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Fitzmaurice, and Ano before him at the time the invention was made, to apply the playback ring of Ano to scroll through the displayed content of Minakuchi and Fitzmaurice, i.e. to rotate the spherical display. It would have been advantageous to one of ordinary skill to use such a playback ring, because it allows the user to more efficiently scroll through content, as is demonstrated by Ano (see e.g. paragraphs 0006-0009).

Claims 26-28 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, and Barbieri, which is described above, and also over the teachings of Ano, also described above.

Specifically regarding claim 26, Minakuchi describes a spherical display for simultaneously displaying first content and second content, wherein the spherical display comprises a flat display surface for the first content and a spherical display surface for the second content, and wherein the first and second content are stored in a storage module, as is described above. Minakuchi further demonstrates that this second content comprises menu information, and Barbieri teaches applying such an interface to search for video content, i.e. such that the first content comprises a video stream, as is described above. Fitzmaurice demonstrates a physical spherical display, as is further described above. Accordingly, the above-described combination of Minakuchi, Fitzmaurice, and Barbieri teach a device similar to that of claim 26, which comprises: a physical spherical display for simultaneously displaying first content, i.e. a video stream, and second content, i.e. menu information, wherein the spherical display comprises a flat display surface for the first content and a spherical display surface for the second content; and a storage module to store the first content and second content. Minakuchi discloses that this second content is scrolled (i.e. the spherical display is rotated) in response to instructions based on an input device, e.g. a trackball, as is described above. As such, Minakuchi, Fitzmaurice, and Barbieri do not explicitly discloses that these instructions for scrolling are based on rotating a playback ring, as is expressed in claim 26. Nevertheless playback rings are well-known types of input devices used for scrolling displayed information. For example, Ano describes a playback

ring (i.e. a "wheel"), which is used in conjunction with, e.g. a trackball, to scroll through content displayed on a screen (see e.g. paragraphs 0005, 0009, and 0098-0101). It would have therefore been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Barbieri, and Ano before him at the time the invention was made, to apply the playback ring of Ano to scroll through the displayed content of Minakuchi and Barbieri, i.e. to rotate the spherical display. It would have been advantageous to one of ordinary skill to use such a playback ring, because it allows the user to more efficiently scroll through content, as is demonstrated by Ano (see e.g. paragraphs 0006-0009).

As per claim 27, Minakuchi demonstrates displaying the second content, i.e. menu information, with a three dimensional effect to distinguish it from the first content, i.e. video stream (see e.g. FIG. 5). Accordingly, the combination of Minakuchi, Fitzmaurice, Barbieri, and Ano described in the previous paragraph teaches a device like that of claim 27.

Concerning claim 28, Minakuchi demonstrates displaying the second content, i.e. menu information, overlaid on top of the first content, i.e. video stream (see e.g. FIG. 5). Accordingly, the above-described combination of Minakuchi, Fitzmaurice, Barbieri, and Ano teaches a device like that of claim 28.

As per claim 40, Fitzmaurice demonstrates that the spherical display is semi-spherically shaped, wherein the spherical display surface substantially spans the semi-spherical shape of the spherical display and the flat display surface is coupled to the spherical display surface and spans a diameter of the spherical display surface (see e.g. paragraph 0025, and FIG. 2).

Art Unit: 2173

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, Barbieri, and Ano, which is described above. As described above, Minakuchi, Fitzmaurice, Barbieri, and Ano teach a device like that of claim 26, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Barbieri particularly teaches that the first content can be a video stream or digital image captured with a content capturing device, as is described above (see e.g. the rejection for claim 3). Minakuchi, Fitzmaurice, and Barbieri, however, do not explicitly teach controlling at least one of the direction and speed of such a video stream, as is required by claim 42. Nevertheless proving users the ability to control the direction and speed of playback of a video stream (by e.g. fast forward, reverse, etc. functions) is notoriously well known in the art. The Examiner takes OFFICIAL NOTICE of this teaching. Accordingly, it would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Fitzmaurice, and Barbieri before him at the time the invention was made, to allow a viewer watching the first content (e.g. a video stream) displayed by the spherical display of Minakuchi, Fitzmaurice, and Barbieri to change the direction or speed of playback of the content, like known in the art. It would have been advantageous to one of ordinary skill to apply this modification because it allows the user to, for example, skip over parts of the content (i.e. by fast forward operations) that are not interesting to the user, as is known in the art.

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, Barbieri, and Ano, which is described above, and also over U.S.

Patent No. 7,107,516 to Anderson et al. (hereafter "Anderson"). As described above, Minakuchi, Fitzmaurice, Barbieri, and Ano teach a device like that of claim 26, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Barbieri particularly teaches that the first content can be a video stream or digital image captured with a content capturing device, as is described above (see e.g. the rejection for claim 3). Minakuchi, Fitzmaurice, and Barbieri, however, do not explicitly disclose that the spherical display is coupled to the content capturing device, as is required by claim 41. Nevertheless, Anderson demonstrates coupling a display device to a content capturing device for the purpose of viewing and searching content captured by the content capturing device (see e.g. column 2, lines 30-51). Accordingly, it would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Fitzmaurice, Barbieri, and Anderson before him at the time the invention was made, to couple a content capturing device to the spherical display of Minakuchi, Fitzmaurice, and Barbieri, since this would allow the user to view on the display content captured by the user, as is demonstrated by Anderson.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, Barbieri, and Ano, which is described above, and also over U.S. Patent Application Publication No. 2004/0264579 to Bhatia et al. (hereafter "Bhatia"). As described above, Minakuchi, Fitzmaurice, and Barbieri teach a device like that of claim 26, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the

spherical display. Barbieri particularly teaches that the first content can be a video stream or digital image captured with a content capturing device, as is described above (see e.g. the rejection for claim 3). Minakuchi, Fitzmaurice, and Barbieri, however, do not explicitly disclose that multiple video feeds are simultaneously displayed, as is required by claim 43. Nevertheless, simultaneously displayed multiple video feeds are well known in the art. For example, Bhatia demonstrates a method for simultaneously displaying a plurality of video streams (see e.g. paragraphs 0011-0014). It would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Fitzmaurice, Barbieri, and Bhatia before him at the time the invention was made, to apply the display of Minakuchi, Fitzmaurice, and Barbieri to simultaneously display a plurality of video feeds, because it is a useful feature in video presentation systems, as taught by Bhatia (see e.g. paragraphs 0004-007).

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, Barbieri, and Ano, which is described above, and also over U.S. Patent Application Publication No. 2003/0146915 to Brook et al. (hereafter "Brook"). As described above, Minakuchi, Fitzmaurice, Barbieri and Ano teach a device like that of claim 26, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Barbieri particularly teaches that the first content can be a video stream or digital image captured with a content capturing device, as is described above (see e.g. the rejection for claim 3). Minakuchi, Fitzmaurice, and Barbieri, however, do not explicitly disclose that the spherical display is configured to apply special effects (i.e. sepia tone, black and white

tone, and/or slow shutter effect) to a portion of this content, as is required by claim 44.

Nevertheless applying such special effects to video is well known in the art. For example, Brook demonstrates applying sepia tone and black and white special effects (see e.g. paragraph 0186). It would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Fitzmaurice, Barbieri, and Brook before him at the time the invention was made, to modify the display of Minakuchi, Fitzmaurice, and Barbieri to apply special effects to the content, like taught by Brook. It would have been advantageous to one of ordinary skill to apply this modification because it allows the user to, for example, change to appearance of the content to suit his or her taste, as is demonstrated by Brook.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine Basom whose telephone number is (571) 272-4044. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

btb 8/16/2007

JOHN CABECA
SUPERVISORY PATENT EXAMINES
TECHNOLOGY CENTER 2100